

nearby for all the needy, in the first-aid rooms of the mining companies. The property loss is estimated at \$40,000.

Three slides in Provo Canyon stopped rail and automobile traffic a few days; one slide at Ophir mining camp, Tooele County, ran at 1 a. m., February 17, demolishing two houses, one of them occupied by four persons who escaped; one slide at Alta, Salt Lake County, did little or no harm; and two slides in Mill Creek Canyon, this county, swept away some of the electric power line and robbed the power plants of water for a few hours; slides in Big Cottonwood and City Creek Canyons, this county, also dammed the streams temporarily, requiring the diversion of other waters into the Salt Lake City mains for a few hours; and two slides in Ogden Canyon blocked traffic several hours on the rail and automobile roads. The heavy snowfall in this storm delayed trains somewhat and hindered automobile traffic generally in the district, though all lines were soon open, and in a few days the valleys were bare.

#### GLACIER WATER UTILIZED IN CITY'S WATER SUPPLY

According to Engineering News-Record of March 4, 1926, the city of Boulder, Colo., has taken steps to purchase from the United States Government the land occupied by the Arapahoe glacier, distant about 15 miles from the city, with the object of supplementing the city's water supply therefrom. This is the first instance so far as known of a town or city in this country deriving a part of its water supply from a glacier.

#### PROVISIONAL SUN-SPOT RELATIVE NUMBERS, WOLFER, FOR 1925

[Reprinted from tables by A. Wolfer in Meteorologische Zeitschrift for April, July, October, 1925, and January, 1926]

1925	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.	0	8		10	19	40	22	23	76			
2.	0	19	8	8	23	83	28	22	59			62
3.	7	17	7	7	35	92	39	26	80	55		
4.	7	7?		14	35	80	47	0	73	54	17	64
5.	0	8	0	19	31	94	66	8	60			67
6.	0	8		17	43	73	50	23	71	35		
7.	0			24	37	89	48	28	43	31		60?
8.	0	38	0	21	34	118	61	40	38			80
9.	0	22	0	31	43	114		56	65		39	56
10.	0	40	0		39	109	43	70	47			
11.	8	39	9			102	38	57	36			88
12.	11	53	17	52		89	37	47	30	48		100
13.		71	17	57	27	88	39	46	21	62		139
14.	0			42	38	56	20	31	30			
15.		49		35	47	35	21	7	42	87		
16.		15?	20	31	47	17	41	7	60	96		157
17.		31	28	42	78	8	40	7				136
18.		12	34	35	83	13	31	10	51	109		132
19.		26	32	60	70	7	28	28	60	57?		103?
20.		13	24		69	0	35	24	67			137
21.	11	11	17	40	74	0?	38	30	76	123		128
22.				44	71	18	20	19	83	116		105?
23.	8	13		36	54	14	0	31	77	98	124	111
24.	8	14			39	7	16	30				
25.		0			32	12	27		76	76	136	
26.		7?			28	11	28	64	82	59		
27.		0?	43		41	16	30	64	86	51	68?	
28.	0	14	38	7	40	14	33	71	77	44		100
29.	0		34	7	28	11	49	77	77	33		
30.			24	16	26	17	34			29	62	84
31.	0		22		17			92				91
Means	3.2	201.8	18.7	28.5	43.0	47.6	34.8	35.8	60.9	66.8	74.3	100.0

#### EVAPORATION IN VEGETATION AT DIFFERENT HEIGHTS

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Mr. Frank C. Gates in the American Journal of Botany for March, 1926, pp. 167-178, presents the results of a study of the rates of evaporation encountered by

plants at various heights above ground level under various weather conditions during 40 to 52 days during the season of greatest evaporation in the years 1917-1922 inclusive. Standard Livingston porous cup atmometers were used. The scene of the investigations was the Douglas Lake region of Cheboygan county, Michigan.

Looking over the results as a whole, it is plainly evident that there is always an increase in the rate of evaporation as one increases the height of the instrument above the ground. The wide range of values, however, also clearly shows that the local factors are of great importance in determining the actual magnitude of the increase. Likewise, the region and the time of year need consideration. In the present work the increase in height amounted to from 0.2 meter to 5.8 meters. The atmometers were maintained at the top of the crown in order to evaluate the conditions that the plants were meeting as they grew higher from the ground levels at which they started. The climatic variations in different years . . . account for a wide variation in values for any given spot. Aside from this fact, however, the greatest rates of increase were in the bog sets because the ground rate was there so distinctly low. Next came the marsh series and last the upland tree series . . .

An increase in evaporation was uniformly shown, even if the atmometer at the higher level was only 0.2 meter above the lower. It appears that, in the crowns of the plants utilized, the increase is rapid at first but decreases with increase in height.

A plant meets conditions of increasing severity as it grows upward . . . In this region and in this series of experiments, this change in conditions has meant, under the conditions of experimentation, an increase of 6.06 c. c./m./day (to 4 meters) in pine groves; 3.55 c.c./m.day (to 6.1 meters) in aspen groves; 13.78 c. c./m./day (to 1.9 meters) in bogs; 10.56 c.c. /m./day (to 1.3 meters) in a bog-swamp; and 7.83 c.c. /m./day (to 1.1 meters) in marshes—all with white atmometers. With black atmometers the increases were 11.1 c. c./m./day (to 4.6 meters) in aspen groves, and 8.99 c. c./m./day (to 1.1 meters) in marshes.

#### WARMEST FEBRUARY AT LONDON IN 156 YEARS

February temperature was a record in England, and the observations at the Greenwich Observatory published in the Daily Weather Reports of the Meteorological Office and in the Weekly Returns of the Registrar-General show some exceptional results. The mean air temperature for the month at Greenwich was 45.7° F., which is the highest mean for London or Greenwich during the last 156 years; it is 6.9° above the monthly normal for the 150 years from 1770 to 1919, and in practical agreement with the normal for April. In this long series of years the February mean for 1869 was approximately in agreement with that for 1926, and the only other means of 45° or above were 45.3° in 1779 and 45.1° in 1872. There were two days, February 21 and 26, with the shade temperature above 60°, and there were 11 days with the temperature above 55°; there were 8 days with the temperature for the 24 hours 10° or more in excess of the normal, while the only days with the temperature below the normal were February 9 to 14. The minimum or night temperature was above 40° on 17 nights, and there were only two nights, February 13 and 14, with frost in the shade. On two days, February 22 and 26, the black-bulb thermometer in the sun's rays exceeded 100°, the respective readings being 106° and 111°, but the duration of bright sunshine for the month was small, registering only 1.3 hours a day on the average, while the normal is 2.0 hours. Separating the mean of 150 years into periods of 50 years, the means at Greenwich for February at 38.1° for 1770-1819, 39.0° for 1820-1869, 39.4° for 1870-1919; the mean for the 150 years is 38.8°. The normal for 35 years, 1880-1915, in general use by the Meteorological Office is 39.8°.—*Nature*, March 13, 1926.